

**Louisiana Department of Environmental Quality (LDEQ)  
Office of Environmental Services**

**STATEMENT OF BASIS**

**Thoma-Sea Ship Builders, LLC  
Thoma-Sea Ship Builders, LLC - Lockport Yard  
Lockport, Lafourche Parish, Louisiana  
Agency Interest Number: 2449  
Activity Number: PER20040002  
Proposed Permit Number: 1560-00062-V0**

**I. APPLICANT**

**Company:**

Thoma-Sea Ship Builders, LLC  
6130 Highway 308  
P.O. Box 399  
Bourg, LA 70374

**Facility:**

Thoma-Sea Ship Builders, LLC  
6130 Hwy 308 S  
Lockport, Lafourche Parish, Louisiana  
Approximate UTM coordinates: 738.156 km East, 3282.228 km North, Zone 15

**II. FACILITY AND CURRENT PERMIT STATUS**

Thoma-Sea Ship Builders, LLC owns and operates the Lockport Yard, an existing shipyard facility which began operation in August of 2003. Thoma-Sea purchased the property, buildings, and other immoveable assets from Halter Marine in April of 2003. Halter Marine had operated a shipyard facility at the site until January 2003.

Thoma-Sea currently operates the Lockport Yard under Compliance Order AE-CN-0212 issued February 13, 2006. The order issued interim limits to the facility and required that Thoma-Sea obtain a Part 70 permit.

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### **III. PROPOSED PROJECT/PERMIT INFORMATION**

#### **Application**

A permit application and Emission Inventory Questionnaire were submitted by Thoma-Sea Ship Builders, LLC on November 17, 2004, requesting a Part 70 operating permit. Additional information dated January 5, 2005, July 5, August 3, 2007, June 13, 2008, January 16 and 26, and February 9, 2009, was also received.

#### **Project**

The Lockport facility fabricates and finishes ships from pre cut steel plating and structural steel. Processes employed during fabrication and finishing of ships includes the welding of steel, sandblasting, and the application of primers and finish coatings. These activities occur on vessels in docks, outdoors in yard areas, and indoors in fabrication areas. All paints used at the Lockport Yard are applied with airless sprayers and are not thinned during use per the manufacture's recommendations.

Other facility activities include one 3,000 gallon diesel storage tank and frequent use of mobile cranes to lift parts of vessels and transport them to different work areas.

#### **Proposed Permit**

Permit 1560-00062-V0 will be the initial Part 70 operating permit for the Lockport Yard.

#### **Permitted Air Emissions**

Estimated emissions in tons per year are as follows:

<u>Pollutant</u>	<u>Emissions</u>
PM <sub>10</sub>	21.04
SO <sub>2</sub>	-
NO <sub>x</sub>	-
CO	-
VOC *	11.68

**\* VOC LAC 33:III Chapter 51 Toxic Air Pollutants (TAPs):**

<u>Pollutant</u>	<u>Emissions</u>
Cumene	< 0.01
Ethyl Benzene	0.49
Methanol	0.03

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**\* VOC LAC 33:III Chapter 51 Toxic Air Pollutants (TAPs):**

n-Butyl Alcohol	1.73
Toluene	0.10
Xylene	2.66
Total	5.01

**\* Other VOC:** 6.67

**Non-VOC LAC 33:III Chapter 51 Toxic Air Pollutants (TAPs):**

<b><u>Pollutant</u></b>	<b><u>Emissions</u></b>
Chromium VI	< 0.001
Manganese	0.01
Nickel	< 0.001
Total	0.01

**Supplemental LAC 33:III Chapter 51 Toxics Air Pollutants (TAPs):**

Cobalt < 0.01

#### **IV REGULATORY ANALYSIS**

The applicability of the appropriate regulations is straightforward and provided in the Specific Requirements section of the proposed permit. Similarly, the Monitoring, Reporting and Recordkeeping necessary to demonstrate compliance with the applicable terms, conditions and standards are also provided in the Specific Requirements section of the proposed permit.

### Table 1. Applicable Louisiana and Federal Air Quality Requirements

[illegible]

\* The regulations indicated above are State Only regulations.

▲ All LAC 33:III Chapter 5 citations are federally enforceable including LAC 33:III.501.C.6 citations, except when the requirement found in the "Specific Requirements" report specifically states that the regulation is State Only.

## KEY TO MATRIX

- 1 - The regulations have applicable requirements that apply to this particular emission source.  
- The emission source may have an exemption from control stated in the regulation. The emission source may not have to be controlled but may have monitoring, recordkeeping, or reporting requirements.
- 2 - The regulations have applicable requirements that apply to this particular emission source but the source is currently exempt from these requirements due to meeting a specific criterion, such as it has not been constructed, modified or reconstructed since the regulations have been in place. If the specific criteria changes the source will have to comply at a future date.
- 3 - The regulations apply to this general type of emission source (i.e. vents, furnaces, towers, and fugitives) but do not apply to this particular emission source.

**Blank – The regulations clearly do not apply to this type of emission source.**

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**XI. Table 2. Explanation for Exemption Status or Non-Applicability of a Source**

ID No:	Requirement	Notes
UNF001	Area Sources of Toxic Air Pollutants [LAC 33:III.5301.A]	DOES NOT APPLY. The Lockport Yard is not one of the listed area sources in LAC 33:III.5301.A.1-7.
	Chemical Accident Prevention and Minimization of Consequences [LAC 33:III.5901]	DOES NOT APPLY. The Lockport Yard contains no sources which produce, handle, process, or store substances listed in LAC 5907.A Table A in quantities greater than the listed threshold.
	Chemical Accident Prevention Provisions [40 CFR 68]	DOES NOT APPLY. The Lockport Yard contains no sources which produce, handle, process, or store substances listed in 40 CFR 68.130 in quantities greater than the listed threshold.
	Emission Standards for Sulfur Dioxide [LAC 33:III.1502.A.3]	DOES NOT APPLY. Emission source emits less than 5 tons per year or more of SO <sub>2</sub> .
ARE001	Comprehensive Toxic Air Pollutant Emission Control Program [LAC 33:III.5101.A]	EXEMPT. The Lockport Yard is not a major source which emits more than 10 TPY of any single toxic air pollutant (TAP) or 25 TPY of any combination of TAPs. This exemption is from the STATE-ONLY requirements of LAC 33:III.Chapter 51.
ARE002	Emission Standards for Sulfur Dioxide [LAC 33:III.1502.A.3]	DOES NOT APPLY. Emission source emits less than 5 tons per year or more of SO <sub>2</sub> .
ARE003	Emission Standards for Sulfur Dioxide [LAC 33:III.1502.A.3]	DOES NOT APPLY. Emission source emits less than 5 tons per year or more of SO <sub>2</sub> .
	Comprehensive Toxic Air Pollutant Emission Control Program [LAC 33:III.5101.A]	EXEMPT. The Lockport Yard is not a major source which emits more than 10 TPY of any single toxic air pollutant (TAP) or 25 TPY of any combination of TAPs. This exemption is from the STATE-ONLY requirements of LAC 33:III.Chapter 51.

The above table provides explanation for both the exemption status or non-applicability of a source cited by 1, 2 or 3 in the matrix presented in Section X (Table 1) of this permit.

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**Prevention of Significant Deterioration (PSD)/Nonattainment Review**

A PSD/non-attainment review is not required for this permit because the Lockport Yard is not a major stationary source as defined in LAC 33:III.509.B

**Streamlined Equipment Leak Monitoring Program**

<b>Unit or Plant Site</b>	<b>Program Being Streamlined</b>	<b>Stream Applicability</b>	<b>Overall Most Stringent Program</b>
Lockport Yard	Not applicable	Not applicable	Not applicable

**MACT Requirements**

This permit was reviewed for compliance with 40 CFR 70, the Louisiana Air Quality Regulations and National Emission Standards for Hazardous Air Pollutants (NESHAP). Prevention of Significant Deterioration (PSD) and New Source Performance Standards (NSPS) do not apply.

This facility is a minor source of toxic air pollutants (TAPs) pursuant to LAC 33:III.Chapter 51.

THOMA-SEA began operation of the Lockport Yard less than two years after Halter Marine, a shipyard facility, ceased operations. Based on EPA guidance<sup>1</sup>, LDEQ considers the Lockport Yard an 'existing' source, and not a 'new' source.

Also, Halter Marine had been a major source of HAPs and subject to the provisions of 40 CFR 63 – Subpart II. From LDEQ's Toxic Emission Data Inventory (TEDI), Halter Marine had operated as a major source after the compliance date of 40 CFR 63 – Subpart II. Major sources subject to a MACT standard must change to area source status prior to the "first compliance date" of that standard in order to avoid the requirements for major sources under that standard, including the necessity for a title V permit. If a facility does not take appropriate emission limits by this deadline, then the facility is classified as a major source for the purposes of that standard since Section 501(2) provides that any source that is major under Section 112 will also be major under Title V.<sup>2</sup>

<sup>1</sup> 'In the Matter of Monroe Electric Generating Plant', Petition 6-99-2, pp.8-10.

<sup>2</sup> March 23, 2000 EPA Memo entitled 'Applicability of the May 16, 1995 Memorandum "Potential to Emit for MACT Standards – Guidance on Timing Issues" for Subpart T Sources Who Become Non-major after the Compliance Date of the Standard'; by William T. Harnett, Acting Director, Information Transfer and Program Integration Division, OAQPS (MD-12)

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Therefore, LDEQ has determined that EPA's 'once-in always-in'<sup>3</sup> interpretation of MACT requirements applies to the Lockport Yard. Part 70 and 40 CFR 63 Subpart II requirements apply to the facility.

**Air Quality Analysis**

Emissions associated with the proposed modification were reviewed by the Air Quality Assessment Division to ensure compliance with the NAAQS and AAS. LDEQ did not require the applicant to model emissions.

**General Condition XVII Activities**

The facility will comply with the applicable General Condition XVII Activities emissions as required by the operating permit rule. However, General Condition XVII Activities are not subject to testing, monitoring, reporting or recordkeeping requirements. For a list of approved General Condition XVII Activities, refer to the Section VIII – General Condition XVII Activities of the proposed permit.

**Insignificant Activities**

All Insignificant Activities are authorized under LAC 33:III.501.B.5. For a list of approved Insignificant Activities, refer to the Section IX – Insignificant Activities of the proposed permit.

**V. PERMIT SHIELD**

A permit shield has not been included in this proposed permit per 40 CFR 60.6(f) and LAC 33:III.507.I.

**VI. PERIODIC MONITORING**

Source	Monitor	Method	Citation
ARE001 – 01 Boat Painting Areas	VOC Content of the batch of coating	Certification	40 CFR 63.785.a.2

**VII. GLOSSARY**

Carbon Monoxide (CO) – A colorless, odorless gas, which is an oxide of carbon.

Maximum Achievable Control Technology (MACT) – The maximum degree of reduction in emissions of each air pollutant subject to LAC 33:III.Chapter 51 (including a prohibition on such emissions, where achievable) that the administrative authority, upon review of submitted MACT compliance plans and other relevant information and taking into consideration the cost of achieving such emission reduction, as well as any non-air-quality health and environmental impacts and

<sup>3</sup> May 16, 1995 EPA Memo entitled 'Potential to Emit for MACT Standards – Guidance on Timing Issues'; by John S. Seitz, Director, Office of Air Quality Planning and Standards (MD-10)

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energy requirements, determines is achievable through application of measures, processes, methods, systems, or techniques.

Hydrogen Sulfide (H<sub>2</sub>S) – A colorless inflammable gas having the characteristic odor of rotten eggs, and found in many mineral springs. It is produced by the reaction of acids on metallic sulfides, and is an important chemical reagent.

New Source Review (NSR) – A preconstruction review and permitting program applicable to new or modified major stationary sources of air pollutants regulated under the Clean Air Act (CAA). NSR is required by Parts C (“Prevention of Significant Deterioration of Air Quality”) and D (“Nonattainment New Source Review”).

Nitrogen Oxides (NO<sub>x</sub>) – Compounds whose molecules consist of nitrogen and oxygen.

Organic Compound – Any compound of carbon and another element. Examples: Methane (CH<sub>4</sub>), Ethane (C<sub>2</sub>H<sub>6</sub>), Carbon Disulfide (CS<sub>2</sub>)

Part 70 Operating Permit – Also referred to as a Title V permit, required for major sources as defined in 40 CFR 70 and LAC 33:III.507. Major sources include, but are not limited to, sources which have the potential to emit:  $\geq 10$  tons per year of any toxic air pollutant;  $\geq 25$  tons of total toxic air pollutants; and  $\geq 100$  tons per year of regulated pollutants (unless regulated solely under 112(r) of the Clean Air Act) (25 tons per year for sources in non-attainment parishes).

PM<sub>10</sub> – Particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers as measured by the method in Title 40, Code of Federal Regulations, Part 50, Appendix J.

Potential to Emit (PTE) – The maximum capacity of a stationary source to emit any air pollutant under its physical and operational design.

Prevention of Significant Deterioration (PSD) – A New Source Review permitting program for major sources in geographic areas that meet the National Ambient Air Quality Standards (NAAQS) at 40 CFR Part 50. PSD requirements are designed to ensure that the air quality in attainment areas will not degrade.



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Sulfur Dioxide (SO<sub>2</sub>) – An oxide of sulfur.

Sulfuric Acid (H<sub>2</sub>SO<sub>4</sub>) – A highly corrosive, dense oily liquid. It is a regulated toxic air pollutant under LAC 33:III.Chapter 51.

Title V Permit – See Part 70 Operating Permit.

Volatile Organic Compound (VOC) – Any organic compound, which participates in atmospheric photochemical reactions; that is, any organic compound other than those, which the administrator of the U.S. Environmental Protection Agency designates as having negligible photochemical reactivity.